

# **Biological Monitoring Report**

**Combined Sheet Pile and Soil-Bentonite  
Barrier Wall Construction**

**McCormick & Baxter  
Creosoting Company  
Portland, Oregon**

**Task Order No. 71-03-02**

**October 2003**

**Prepared for:**

**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY  
811 Southwest Sixth Avenue  
Portland, Oregon 97204**



# **T**able of Contents

<b>Section</b>	<b>Page</b>
<b>1 Introduction .....</b>	<b>1-1</b>
<b>2 Project Identification.....</b>	<b>2-1</b>
2.1 Site Description.....	2-1
2.2 Construction Activities.....	2-2
2.3 Project Initiation and Completion .....	2-5
<b>3 Baseline Survey.....</b>	<b>3-1</b>
3.1 Vegetation .....	3-1
3.2 Other Observations.....	3-1
<b>4 Monitoring Activities.....</b>	<b>4-1</b>
4.1 Biological Monitoring.....	4-1
4.2 River Stage Monitoring.....	4-2
<b>5 Notification of Sick, Injured, or Dead Species.....</b>	<b>5-1</b>
<b>6 References.....</b>	<b>6-1</b>
<b>Appendix</b>	
<b>A Daily Biological Monitoring Forms .....</b>	<b>A-1</b>
<b>B Erosion and Sediment Transport Control Measure Forms ..</b>	<b>B-1</b>
<b>C Photodocumentation .....</b>	<b>C-1</b>

## List of Abbreviations and Acronyms

BiOp	Biological Opinion
BMPs	Best Management Practices
cfs	cubic feet per second
DEQ	Oregon Department of Environmental Quality
E & E	Ecology and Environment, Inc.
FWDA	former waste disposal area
McCormick & Baxter	McCormick & Baxter Creosoting Company
NGVD	National Geodetic Vertical Datum
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries
Remtech	Remtech, Inc.



# 1

## Introduction

This biological monitoring report was prepared to document the biological monitoring activities associated with the installation of the combined sheet pile and soil-bentonite barrier wall at the McCormick & Baxter Creosoting Company (McCormick & Baxter) site in Portland, Oregon. These activities were described in the *Biological Monitoring and Reporting Plan* (Ecology and Environment, Inc. [E & E] 2003). Biological monitoring and other measures were initiated to ensure that the terms and conditions prescribed within the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) Biological Opinion (BiOp) were fulfilled (NOAA Fisheries 2003). E & E utilized a full-time, on-site biological monitor when construction activities were performed within 100 feet of the shoreline.

This summary report satisfies the reporting requirements of the BiOp, including project identification, project initiation and completion dates, photographic documentation during and after project completion, and documentation of any reported sighting of a sheen on the water for the McCormick & Baxter barrier wall construction project.

The remaining sections of this report are:

- “Project Identification” (Section 2), including a general site description, a summary of construction activities, and project initiation and completion dates;
- “Baseline Survey” (Section 3), which provides a summary of a baseline vegetation survey that was conducted before construction and that will be used to ensure that revegetation requirements are met following sediment cap construction;
- “Monitoring Activities” (Section 4), which describes the various monitoring activities conducted by the on-site biological and construction monitors during construction, including observations of sheen on the water;



## ***1. Introduction***

- “Notification of Sick, Injured, or Dead Species” (Section 5), which includes a discussion of notification activities that occurred during the construction period;
- “References” (Section 6); and
- “Daily Biological Monitoring Forms” (Appendix A), “Erosion and Sediment Transport Control Measure Forms” (Appendix B), and “Photodocumentation” (Appendix C).

# 2

## Project Identification

### 2.1 Site Description

The McCormick & Baxter site is located on the Willamette River in Portland, Oregon, downstream of Swan Island and upstream of the St. Johns Bridge at 6900 North Edgewater Street. The site is directly adjacent to and east of the Willamette River, which flows to the northwest in the site vicinity. The site's surface topography is a generally flat terrace formed by dredged material placement sometime in the early 1900s. The site footprint encompasses approximately 43 acres on land (upland area) and 17 acres in the river (in-water area). The upland portion lies between a 120-foot-high bluff near the northeast border and a 20-foot-high bank along the Willamette River to the southwest. The site is bordered by inactive industrial properties to the south and a residential area on the bluff to the north.

The Willamette River is a major river that flows northwest through Portland and the site to the Columbia River. The Willamette River is the only surface water body at the site. The site is approximately 7 miles upstream of the confluence of the Willamette River and the Columbia River (River Milepost 7). The Willamette River is not used as a drinking water source downstream of the site. The stream reach along the site is approximately 1,500 feet wide and flows at a rate ranging from 8,300 cubic feet per second (cfs) in summer to 73,000 cfs in winter. Channel sounding maps indicate that adjacent to the site, the navigation channel is maintained at a width of approximately 600 feet and to a maximum depth of 40 feet below the Columbia River datum. A sandy beach with woody debris and sparse vegetation is exposed at the base of the bank most of the year, except during brief periods of high river stage (i.e., generally during late winter or early spring).

In the early 1900s, the first industrial structure, a sawmill, was built on the site. In 1944, the McCormick & Baxter Creosoting Company began wood-treating operations that continued until October 10, 1991.

Shallow groundwater gradients generally trend from the bluff toward the river. Intermediate and deep zone groundwater surface elevations and gradients indicate groundwater flow toward the river in these zones (E & E 2002a).



## 2.2 Construction Activities

Former wood-treating operations at the McCormick & Baxter creosoting facility have resulted in widespread contamination of soil and groundwater across much of the property. Key contaminants of concern include carcinogenic polynuclear aromatic hydrocarbons, pentachlorophenol, arsenic, and dioxins/furans. To minimize off-site contaminant migration, a combined subsurface sheet pile and soil-bentonite barrier wall was constructed. This activity also included removal of large pieces of wood along the shoreline to facilitate sheet pile construction. The sheet pile construction did not require removal of any pilings as had previously been anticipated.

The sheet pile wall was driven into the ground adjacent to the river with a vibratory hammer. The other three sides of the containment wall were constructed of a soil-bentonite mix, installed by the slurry trench method utilizing specialized excavation equipment.

### Sheet Pile Wall

The definable features of the sheet pile wall construction — mobilization, site preparation, and installation — are described below.

#### *Mobilization*

Mobilization for the sheet pile wall included delivery and on-site assembly of two cranes, mobilization and assembly of a vibratory hammer and power unit, and delivery and staging of sheet piles.

#### *Site Preparation*

Site preparation included clearing work zones, installing erosion control measures (e.g., silt fencing and biobags) between the working area and the Willamette River, and displacing woody debris along the river to allow for working platform construction. Once the erosion control measures were installed, an approximately 30-foot-wide working platform was constructed along surveyed alignment stakes using a dozer. The platform provided easy and safe access for laborers and equipment and a level working surface for sheet pile installation.

#### *Installation*

Approximately 1,466 linear feet (99,000 square feet) of sheet piles was installed along the bank of the Willamette River using a panel driving technique. The installation technique consisted of setting and partially driving six to eight sheet pile pairs (a panel). Each newly placed pair was checked for plumb and alignment. Alignment was controlled using a template of two welded I-beams, which was placed along the surveyed wall alignment. Before the first panel was driven to grade, a second panel was set and partially driven. After setting of the second panel, the sheet piles in the first panel were driven in reverse order of setting.

Actual driving of the sheet was accomplished using a vibratory hammer suspended and lowered onto the sheet pile using the second crane. Hydraulic lines



connected the power/control unit to the hammer. Using the control switch panel, the sheet pile drivers were able to open and close the vice clamp, turn the vibration on and off, and change the frequency at which the vibrator operated.

Two areas of difficult driving (refusal areas) were encountered during the installation. One area was encountered near the bulkhead/wood retaining wall region (STA 8+00 to 9+00), and the other at the north end tie-in into the soil-bentonite wall (near STA 15+00) in the former waste disposal area (FWDA). Multiple attempts using several different approaches were made to get refusals to plan grade. To ascertain the cause of the refusal, a drill rig and crew were mobilized to the site. Several borings were performed adjacent to and within 2 feet of the refusal sheets. Borings were advanced to depths well below the wall design depth. No obvious obstruction was encountered. It is hypothesized that the refusals were due to a combination of encountering tight sandy formations and the total surficial friction on the sheets. Despite significant efforts, six sheets met with refusal before design penetration depth (three in the bulkhead area and three in the FWDA). The penetration depths of these refusal sheets varied from -28 feet National Geodetic Vertical Datum (NGVD) to -42 feet NGVD (18 feet to 5 feet from design depth, respectively). During hard driving, the sheets would often fatigue and fail in the vice grips of the vibratory head. The six refusal sheets are marked with the bottom elevation of the sheet (in NGVD) torch-cut into the sheet's top end. The tops of all the sheets, except those in ground elevation transition areas, were left with approximately 2 feet of stickup above the ground surface.

### **Soil-Bentonite Barrier Wall**

The following paragraphs briefly describe the mobilization, site preparation, and installation procedures implemented to install the soil-bentonite portion of the barrier wall.

#### *Mobilization*

Specialized equipment mobilized for the construction of the soil-bentonite barrier wall included a long boom excavator allowing excavation to 72 feet below ground surface, a verturi slurry mixer, and a slurry pump. Delivered materials included clay and Naturalgel bentonite (manufactured by Wyo-Ben, Inc.).

#### *Site Preparation*

Site preparation involved survey staking of the wall alignment, clearing/grubbing of the work area, construction of a working platform, and excavation of a slurry mixing pond.

#### *Installation*

The installation of the soil-bentonite wall consisted of trench excavation, slurry preparation and conveyance, soil-bentonite mixing and placement, verification testing, and protective cap installation.



## 2. Project Identification

The process of soil-bentonite wall construction is controlled by specific gravities. The excavated trench was held open using a slurry mix of bentonite and water, which was later displaced by the denser soil-bentonite mixture. Upon trench excavation, slurry was pumped from the slurry mixing pond to the trench via conveyance piping (6-inch high-density polyethylene). As the long boom excavator operator advanced along the wall alignment and reached design depth, soil-bentonite mixture was placed within the trench, displacing the slurry. The soil-bentonite mixing operation occurred concurrently with excavation within the interior of the wall's perimeter. The soil-bentonite mixture consisted of soil excavated from the trench, slurry from the trench, imported clays, and dry bentonite. Soil-bentonite mixing and placement were accomplished by excavators and a bulldozer. Following wall installation, in situ performance verification testing was also performed at five locations along the wall alignment. Borings were advanced at each location, from which three soil-bentonite samples were collected at various depths using a California modified split spoon. The samples were then sent to an off-site laboratory for required testing, including sieve analysis, moisture content, Atterberg limits, density, and permeability. All test results were acceptable.

Once installation of the soil-bentonite barrier wall was completed, a protective cap was installed to minimize the potential for soil-bentonite wall desiccation. The cap consisted of at least 5 feet of relatively clean site soil (removed and segregated during the installation procedure) placed above the soil-bentonite wall in lifts and compacted with a roller. Permanent crossings, constructed of steel plates and traffic cones, were also installed at two locations atop the soil-bentonite wall to provide a stable surface for vehicles crossing the wall and to prevent wall damage from vehicle traffic. An approximately 2-foot-high soil berm was also constructed along the entire soil-bentonite wall perimeter to prevent vehicles from crossing the wall outside the permanent crossings.

### *Additional Activities*

Additional activities performed during the construction of the barrier wall included the following:

- Excavation of approximately 1,500 cubic yards of highly contaminated soils from an inoperable interceptor trench, located shoreward and outside the sheet pile wall near the tank farm area, and inside a wooden piling retaining wall. The excavated soils were buried on site in a disposal cell within the barrier wall limits and covered with at least 4 feet of relatively clean site soils. The piling retaining wall was left in place;
- Removal of treated lumber from the shoreline along the Willamette River; and
- Slope stabilization by grading (approximately 2:1) and installation of an erosion control mat along the Willamette River bank for the entire length

of the sheet pile wall.

### **2.3 Project Initiation and Completion**

The project was initiated on January 7, 2003, with the Notice to Proceed to Remtech, Inc., (Remtech) the construction contractor for the Oregon Department of Environmental Quality (DEQ). On-site activities did not begin until March 24, 2003, when Remtech began to mobilize equipment to the site. Actual construction activities commenced on April 1, 2003. In addition, E & E performed a baseline survey on March 29, 2003, to document preconstruction vegetation conditions at the site. On-site construction activities were substantially completed by August 12, 2003, with overall project completion by September 30, 2003.



# 3

## Baseline Survey

### 3.1 Vegetation

E & E performed a baseline biological survey on March 29, 2003, to document the existing preconstruction vegetation at the site. Biological conditions observed during and after construction were compared to the baseline conditions to evaluate/identify any impact. This initial biological survey will provide a basis for comparison and evaluation of reclamation success, noting that final reclamation will not occur until after the sediment cap and soil cap are completed at the site.

Before construction, there were three distinct vegetative areas on site: the largest portion of the site (or the upland portion of the site), the riverbank, and the beach or riverfront.

Patches of grasses, Scotch broom, Himalayan blackberry, and a few scattered cottonwoods characterized the upland portion of the site (see Appendix C). This area was reseeded following a soil removal in 1999. Seeds used met the requirements specified in Oregon Department of Transportation Specification 03110.60.

The vegetation along the riverbank was a dense mixture of Scotch broom, Himalayan blackberry, grasses, cottonwoods, and maples. There were also a few willows located near the interceptor trench on the southeast bank.

Along the riverfront, many large and small pieces of wood have been deposited along the project site shoreline. Several of the pieces are large, with root wads attached, but most appear to be relatively transitory, with no development of complex wood structures. However, because of the paucity of large wood pieces in the Lower Willamette River, this material likely provides some complexity and limited refuge during high water events. There is also one snag located on the northwest beach.

### 3.2 Other Observations

Directly offshore of the northwest beach, an osprey nest was observed on one of the pilings. The nest was still being built at the time of the survey. In addition, one bald eagle was observed flying over the site. No additional threatened, rare or endangered species were observed.

# 4

## Monitoring Activities

### 4.1 Biological Monitoring

E & E monitored the contractor's procedures during construction for compliance with the applicable Best Management Practices (BMPs). A complete list of BMPs monitored during construction can be found in the *Pollution Control Plan* and the contract documents (E & E 2002b), and as presented in the contractor's *Construction Operations Plan* (Remtech 2003). The BMPs discussed in this section were monitored by either the oversight crew or the biological monitor daily, as applicable. BMP inspections were recorded on the Daily Biological Monitoring Form and/or the Erosion and Sediment Transport Control Measure Form (Appendices A and B, respectively). Additional observations relative to BMPs were noted by the oversight engineers in the daily construction oversight reports and logbooks.

The following BMPs were monitored daily as necessary (including installation and maintenance activities, where applicable):

- Silt fencing and biobags,
- Boom,
- Mobile fueling activities,
- Dust control, and
- Preservation of existing vegetation.

#### Silt Fencing and Biobags

Temporary silt fencing and biobag installation began on April 1, 2003, before construction activities located within 100 feet of the beach. Wildlife and environmental conditions caused the silt fencing to be torn and/or punctured consistently. Repairs, which included patching holes with fresh panels of fence and/or re-stapling fencing to existing stakes, were made to the fence as needed.

High water levels on May 28, 2003, reached the silt fence at the northwest beach. E & E informed the contractors and recommended that the silt fence be moved



#### **4. Monitoring Activities**

closer inland to avoid further impacts. Although one segment of the silt fence was moved slightly inland, high water levels on June 2, 2003, inundated the silt fence and biobags. E & E recommended complete removal of the silt fence and biobags in areas where construction was no longer active.

##### **Boom**

A skirt boom was deployed on April 1, 2003, before construction activities. The boom was moved in accordance with locational changes of construction activities. During the driving of sheet piles, the body of water within and outside the defensive boom was monitored for the presence of any sheen that may be produced as a consequence of sheet pile installation. On several occasions, sheen was observed within the defensive boom during sheet pile operations, and during periods of construction inactivity. Sheen was typically observed during low tides and temperatures greater than 75° Fahrenheit. Sheen was not observed to be a consequence of sheet pile installation activities or other construction activities. Absorbent pads were deployed within the boom area and removed routinely throughout construction. Photographs were taken and are presented in Appendix C.

##### **Mobile Fueling Activities**

Proper BMPs were followed. No spills or leaks were observed.

##### **Dust Control**

Water was applied as necessary during construction activities to minimize the potential of dust.

##### **Preservation of Existing Vegetation**

Along the upland portion of the site, removal of vegetation was limited to those construction areas designated for the slurry trench. Vegetation removal was required along the riverbank for sheet pile operations. Most Himalayan blackberry, Scotch broom, willow, cottonwood, and maple species were removed within the sheet pile operation locations (vegetation located at the top of the bank was crushed as opposed to removed, where feasible). One cottonwood and one snag were left in the northwest portion of the site.

Upon project completion, jute mat was stapled along the bank to minimize erosion impacts.

Most of the pre-existing woody debris that was deposited along the shoreline of the project site was left on the beach. The debris was pushed slightly waterward to make room for the installation of the silt fence. Those pieces that were observed to be contaminated (approximately 20 cubic yards) were removed from the beach to an upland location on site.

#### **4.2 River Stage Monitoring**

E & E oversight personnel also monitored the river stage regularly. A site river staff gauge was installed on April 2, 2003, southeast of the project site. River



#### 4. Monitoring Activities

stage levels were measured at low tide daily, using either the site gauge or United States Geological Survey Gauge No. 14211720 (available URL: <http://waterdata.usgs.gov/nwis/sw>), which is located upstream at the Morrison Bridge in Downtown Portland at River Mile 12.8. A correction factor of -0.1 foot was applied to obtain the river stage level adjacent to the McCormick & Baxter site. High tides were also recorded during spring runoff events and periods of seasonal high water and tides. However, because of the changing tide times, it was not always feasible to be at the site during low and/or high tide. All river stage data were documented on the Daily Biological Monitoring Form (see Appendix A), on the daily construction report form, and in the field logbooks.

During high water events, E & E recommended to the contractor to move all materials, including silt fencing, biobags, and equipment, from the water's edge.

# 5

## Notification of Sick, Injured, or Dead Species

The E & E biological monitor identified two dead fish on the beach during construction activities. Photographs of both species were taken and are included in Appendix C.

One dead Chinook king salmon (*Oncorhynchus tshawytscha*) was found on the morning of April 28, 2003, on the northwest beach approximately 10 feet south-east of Station 12+00. The fish was approximately 33 inches long, and partially decomposed around the eye and jaw area. The specific cause of death is unknown. However, based on the state of decomposition, the fish appeared to have been dead for a day or more.

One dead steelhead (*Oncorhynchus mykiss*) was found on the morning of May 27, 2003, at the northwest beach near STA 10+35. The fish was approximately 28 inches long and in fair condition. The specific cause of death is unknown.

E & E followed the notification procedures outlined in the site-specific *Biological Monitoring and Reporting Plan* (E & E 2003). Initial notification was made to the NOAA Fisheries Law Enforcement Office, Vancouver Field Office, on the same day on which each fish was found. E & E also notified Dr. Nancy Munn of NOAA Fisheries' Oregon Habitat Branch to inform her of the finding. No request to bag and preserve the dead species was made by either party.

No other sick, injured, or dead species were observed during construction activities.

# 6

## References

Ecology and Environment, Inc., (E & E) 2003, *Biological Monitoring and Reporting Plan*, submitted to the Oregon Department of Environmental Quality (DEQ), E & E, Portland, Oregon.

\_\_\_\_\_, 2002a, *Sediment Cap Basis of Design*, submitted to DEQ, E & E, Portland, Oregon.

\_\_\_\_\_, 2002b, *Contract Documents for Combined Sheet Pile and Soil-Bentonite Barrier Wall*, submitted to DEQ, E & E, Portland, Oregon.

National Oceanic and Atmospheric Administration Fisheries, 2003, *Biological Opinion for Construction of the Barrier Wall at the McCormick and Baxter Creosoting Company Superfund Site, Willamette River, Portland, Oregon*, submitted to the United States Environmental Protection Agency, Oregon Operations Office.

Remtech, Inc., (Remtech) 2003, *Construction Operations Plan for McCormick and Baxter Combined Sheet Pile and Soil-Bentonite Barrier Wall*, submitted to the Oregon Department of Environmental Quality, Remtech, Tacoma, Washington.





**A**

# **Daily Biological Monitoring Forms**

# Daily Biological Monitoring Form

Monitor's Name: Erin E. Murphy

Date: 04-01-03

Time: 1730

Time(s) of Low Tide: \_\_\_\_\_

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NVGD):

River stage at site using correction factor (-0.1ft) from Morrison Bridge (ft NVGD):

Staff gauge height at site (ft):

Previous staff gauge height at site (ft):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NVGD):

\*Note, NGVD = CRD + 1.74 ft

8.05	time: 1500
7.95	
NA	time:
NA	date/time:
NA	
5 ft	
	time:

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High ☒ Average ☐ Low ☐ Average for rain conditions.

Observable difference in Water Quality near construction area?

Yes ☐ No ☐

Observable sheen in boomed area?

Yes ☐ No ☐

Observable sheen outside boomed area?

Yes ☐ No ☐

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00 4 + 00

Approximate location of current sheet pile operation (STA.):

NA

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes ☐ No ☐

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes ☐ No ☐

If yes, did you note time, direction, and location?

Yes ☐ No ☐

Photolog reference numbers:

Camera A, Roll 1, Photo Numbers 9 & 10; Digital Photo Numbers 2, 3, & 5-7

## Perimeter Walk

Observations: Some logs were removed from the beach to make room for the silt fence. Logs will

be replaced in their approximate location after fence is complete.

Containment boom deployed by west coast marine and cleaning.

Animal Species identified: Several birds on or near site.

## Corrective Actions:

## Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin E. Murphy

Date: 04-02-03

Time: 1730

Time(s) of Low Tide: \_\_\_\_\_

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.51 time: 1030

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.41

Staff gauge height at site (ft):

5.8 time: 1130

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.55

Previous staff gauge elevation at site (ft NGVD):

NA date/time:

River level rise (+) or fall (-) rate (ft/hr):

+0.23 (USGS)

Approximate distance from water to work area (ft):

5

Elevation of water surface at low tide (ft NGVD):

time:

\*Note, NGVD = CRD + 1.74 ft

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High ☒ Average ☐ Low ☐ Average for rain conditions.

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00

4 + 00

Approximate location of current sheet pile operation (STA.):

NA

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

None

## Perimeter Walk

Observations: Staff gauge installed.

Animal Species identified: Several birds on or near site.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin E. Murphy

Date: 04-03-03

Time: 1730

Time(s) of Low Tide: \_\_\_\_\_

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.47 time: 1330

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.37

Staff gauge height at site (ft):

5.6 time: 1500

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.35

Previous staff gauge elevation at site (ft NGVD):

8.55 date/time: 04-02-03/1130

River level rise (+) or fall (-) rate (ft/hr):

-0.0072

Approximate distance from water to work area (ft):

200

Elevation of water surface at low tide (ft NGVD):

time:

\*Note, NGVD = CRD + 1.74 ft

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High ☒ Average Low Average for rain conditions.

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00

4 + 00

Approximate location of current sheet pile operation (STA.):

NA

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

None

## Perimeter Walk

Observations:

Animal Species identified: Several birds on or near site.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

**Monitor's Name:** Erin E. Murphy

**Date:** 04-07-03

**Time:** 1730

**Time(s) of Low Tide:** \_\_\_\_\_

**River Stage and Observations**

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.00	time: 0800
7.90	
5.4	time: 0800
8.15	
8.35	date/time: 04-03-03/1500
-0.01176	
15	
	time:

**Water Quality Observations of Willamette River**

Qualitative turbidity observation main channel away from site (circle one): High

☒ Average ☐ Low

Average for rain conditions.

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

**In-water Controls**

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

**Habitat**

Were shoreline features moved or displaced since last monitoring event?

☐ Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

**Photo Documentation**

Were photographs taken during monitoring event?

☐ Yes

☐ No

If yes, did you note time, direction, and location?

☐ Yes

☐ No

Photolog reference numbers:

Camera B, Roll #1, Photo Numbers 6, 7, 8, 9, & 10.

**Perimeter Walk**

Observations: Several fishing boats out in the morning. Logs were moved on beach for installation of silt fence. Work was performed between approximate station #'s 1+00 thru 5+00.

Animal Species identified: Several birds on or near site.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin E. Murphy

Date: 04-08-03

Time: 1730

Time(s) of Low Tide: 703

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NVGD):

8.30 time: 0900

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.20

Staff gauge height at site (ft):

5.65

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.4

Previous staff gauge elevation at site (ft NGVD):

8.15

date/time: 04-07-03/0800

River level rise (+) or fall (-) rate (ft/hr):

+0.01

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

6.3

time: 0703

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00

6 + 00

Approximate location of current sheet pile operation (STA.):

NA

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll # 2, Photo # 1; Camera B, Roll # 2, Photos #'s 1 & 2.

Digital photo #19 of boom and #27 of platform.

## Perimeter Walk

Observations: Several fishing boats out in the morning. Logs were moved on beach for installation of silt fence to station 5 + 74. Platform was built along beach from 2 + 50 - 6 + 00. Clearing activities were performed from approximate station 1 + 00 thru 6 + 00. Additional boom length was added to existing boom up to station 6 + 00.

Animal Species identified: Several birds on or near site. Two rabbits observed.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

**Monitor's Name:** Erin E. Murphy

**Date:** 04-09-03

**Time:** 1730

**Time(s) of Low Tide:** 756

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.61 time: 0800

7.51

4.98 time: 0756

7.73

8.4 date/time: 04-08-03/0900

-0.029

15

7.51 time: 0756

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00

6 + 00

Approximate location of current sheet pile operation (STA.):

NA

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Digital photo #38

## Perimeter Walk

Observations: Several fishing boats out in the morning. Platform re-shaping activities were

performed on beach from station numbers 2 + 50 - 6 + 00.

Silt fence was repaired in areas need at 0945.

Animal Species identified: Several birds on or near site. One river otter sited 50' off shore.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 04-10-03

Time: 1730

Time(s) of Low Tide: 911

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

7.68 time: 0930

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

7.58

Staff gauge height at site (ft):

5.0 time: 0920

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

7.75

Previous staff gauge elevation at site (ft NGVD):

7.73 date/time: 04-09-03/0746

River level rise (+) or fall (-) rate (ft/hr):

0

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

17.75 time: 0911

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes No

Observable sheen in boomed area?

Yes No

Observable sheen outside boomed area?

Yes No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00 6 + 00

Approximate location of current sheet pile operation (STA.):

2 + 50 2 + 57

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes No

If yes, did you note time, direction, and location?

Yes No

Photolog reference numbers:

## Perimeter Walk

Observations:

The containment boom may require more anchoring or is dragging one anchor slightly shoreward.

Animal Species identified:

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-14-03

Time: 1730

Time(s) of Low Tide: 1352

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.00 time: 1400

7.90

5.4

time: 1352

8.15

7.75

date/time: 04-10-03/0920

0.00398

15

8.15

time: 1352

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1 + 00

6 + 00

Approximate location of current sheet pile operation (STA.):

2 + 57

2 + 77

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll 2, Photo #'s 4-10

Video taken of sheet pile and slurry operations.

## Perimeter Walk

Observations:

The containment boom was washed in shore upon arrival. West Coast Marine adjusted boom at approximately 1015 to previous location. Activities on east beach include: sheet pile operation and TM well abandonment.

Activities on west beach include: installation of silt fence (STA 14 + 00- 15 + 00), clearing and grading

(STA 14 + 00 - 16 + 00), and well abandonment (EW-13).

Animal Species identified: Canadian geese, Osprey, Mallards, Crows, blue bird, and one rabbit.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-15-03

Time: 1730

Time(s) of Low Tide: 1442

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.28 time: 1430

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.18

Staff gauge height at site (ft):

5.7

time: 1442

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.44

Previous staff gauge elevation at site (ft NGVD):

8.15

date/time: 04-14-03/1352

River level rise (+) or fall (-) rate (ft/hr):

0.011837

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

8.15

time: 1352

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

Average

Low

Rain

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+00

6+00

Approximate location of current sheet pile operation (STA.):

2+77

3+15

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll 2, Photo #'s 11-18

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile operation and TM well abandonment.

Activities on west beach include: installation of bio bags along silt fence (STA 14+00- 15+00), construction of platform (STA 15+00 - 16+50). Sewer line locating crew excavated pits along the northwest fence line.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Cormorants and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-16-03

Time: 1730

Time(s) of Low Tide: 1531

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

9.00 time: 1530

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.90

Staff gauge height at site (ft):

5.4 time: 1531

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.11

Previous staff gauge elevation at site (ft NGVD):

8.44 date/time: 04-15-03/1442

River level rise (+) or fall (-) rate (ft/hr):

+0.0132

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

8.11 time: 1531

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+00

6+00

Approximate location of current sheet pile operation (STA.):

3+15

3+60

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll 2, Photo #'s 21-23

Camera B, Roll 3, Photo #2 13-14

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: construction of platform (STA 15+00 - 16+50). Well abandonment (EW-6s, EW-3s). Sewer line locating crew filled in excavated pits and installed sounding tubes along the northwest fence line.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Cormorants, Crows and one bob cat.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

**Monitor's Name:** Erin Murphy

**Date:** 04-17-03

**Time:** 1730

**Time(s) of Low Tide:** 1618

**River Stage and Observations**

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.84 time: 1630

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.74

Staff gauge height at site (ft):

6.2 time: 1618

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.9

Previous staff gauge elevation at site (ft NGVD):

8.11 date/time: 04-16-03/1531

River level rise (+) or fall (-) rate (ft/hr):

0.008

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

8.9 time: 1618

**Water Quality Observations of Willamette River**

Qualitative turbidity observation main channel away from site (circle one):

High

☒ Average

☐ Low

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

**In-water Controls**

Approximate location of boom (STA. To STA.):

1+00

6+00

Approximate location of current sheet pile operation (STA.):

3+60

3+90

**Habitat**

Were shoreline features moved or displaced since last monitoring event?

Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

**Photo Documentation**

Were photographs taken during monitoring event?

Yes

☐ No

If yes, did you note time, direction, and location?

Yes

☐ No

Photolog reference numbers:

**Perimeter Walk**

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: construction of platform (STA 15+00 - 16+50). Geo-tech began installation of slope inclinometers (STA 15+75, 18+00).

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Cormorants, and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-21-03

Time: 1730

Time(s) of Low Tide: 633

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.10	time: 0630
8.00	
6.65	time: 1000 High Tide
9.4	
10.43	date/time: 04-17-03/0722
0.009952	High Tide
15	
8.00	time: 0633 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

☒ Average

Low

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

1+00	6+00
3+60	3+90

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

☐ Yes

No

If yes, did you note time, direction, and location?

☐ Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: construction of platform (STA 15+00 - 19+50). Installation of bio bags along silt fence.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Cormorants, and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-22-03

Time: 1730

Time(s) of Low Tide: 733

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.73	time: 0730
7.63	
6.00	time: 1057 High Tide
8.75	
9.4	date/time: 04-21-03/1000
-0.026	High Tide
15	
7.63	time: 0633 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

☒ Average

Low

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

1+00	6+00
3+90	4+50

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

☐ No

If yes, did you note time, direction, and location?

Yes

☐ No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Construction of slurry trench.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Cormorants, and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-23-03

Time: 1730

Time(s) of Low Tide: 840

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.94 time: 0830

7.84

5.29

time: 0840 Low Tide

8.04

8.75

date/time: 04-22-03/1057

High Tide

+0.0084 (USGS)

15

8.04

time: 0840 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Rain conditions

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+00

6+00

Approximate location of current sheet pile operation (STA.):

4+50

5+00

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-24-03

Time: 1730

Time(s) of Low Tide: 1000

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

NA	time: 1000
#VALUE!	
6.08	time: 1000 Low Tide
8.83	
8.04	date/time: 04-23-03/0840
+0.0316	
15	
8.83	time: 1000 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+00 6+00

Approximate location of current sheet pile operation (STA.):

5+00 0

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

None required.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-28-03

Time: 1730

Time(s) of Low Tide: 1410

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.09

time: 1400

7.99

5.49

time: 1410 Low Tide

8.24

8.83

date/time: 04-24-03/1000

-0.0059

15

8.24

time: 1000 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High ☒ Average ☐ Low ☐

Observable difference in Water Quality near construction area?

Yes

No ☐

Observable sheen in boomed area?

Yes

No ☐

Observable sheen outside boomed area?

Yes

No ☐

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+00

6+00

Approximate location of current sheet pile operation (STA.):

5+45

5+80

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No ☐

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No ☐

If yes, did you note time, direction, and location?

Yes

No ☐

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Dead Chinook King Salmon (*Oncorhynchus tshawytscha*) identified on the west beach, approximately 10' SE of STA 12+00.

Corrective Actions:

## Notifications Made:

Photos were taken of Chinook. Calls were made to both NOAA Law Enforcement and Dr. Nancy Munn of the Oregon NOAA branch. No request was made to preserve/bag dead Chinook.

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

**Monitor's Name:** Erin Murphy

**Date:** 04-29-03

**Time:** 1730

**Time(s) of Low Tide:** 1452

**River Stage and Observations**

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.41

time: 1430

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.31

Staff gauge height at site (ft):

5.78

time: 1452 Low Tide

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

8.53

Previous staff gauge elevation at site (ft NGVD):

8.24

date/time: 04-28-03/1410

River level rise (+) or fall (-) rate (ft/hr):

+0.0118

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

8.53

time: 1452 (Site)

**Water Quality Observations of Willamette River**

Qualitative turbidity observation main channel away from site (circle one): High

☒ Average

☐ Low

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

**In-water Controls**

Approximate location of boom (STA. To STA.):

1+50

7+50

Approximate location of current sheet pile operation (STA.):

5+80

6+25

**Habitat**

Were shoreline features moved or displaced since last monitoring event?

Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

**Photo Documentation**

Were photographs taken during monitoring event?

Yes

☐ No

If yes, did you note time, direction, and location?

Yes

☐ No

Photolog reference numbers:

**Perimeter Walk**

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 04-30-03

Time: 1730

Time(s) of Low Tide: 1530

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.54

time: 1530

8.44

5.90

time: 1530 Low Tide

8.65

8.53

date/time: 04-29-03/1452

+0.004898

15

8.65

time: 1530 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+50

7+50

Approximate location of current sheet pile operation (STA.):

6+42

7+10

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll 3, #'s14-17

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction. Installation of additional silt fence from approximate STA 13+00-8+62. Clearing of driftwood from beach, exsisting trees and vegetation took place from

STA 12+50 to 8+82.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-01-03

Time: 1730

Time(s) of Low Tide: 1605

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

8.33 time: 1600

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

8.23

Staff gauge height at site (ft):

7.15

time: 1605 Low Tide

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

9.9

Previous staff gauge elevation at site (ft NGVD):

8.65

date/time: 04-30-03/1530

River level rise (+) or fall (-) rate (ft/hr):

+0.004898

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

8.65

time: 1530 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+50

7+50

Approximate location of current sheet pile operation (STA.):

7+10

7+50

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Clearing of exsisting trees and vegetation took place from STA 12+50 to 8+82. Required bio bags were installed from approximate STA 13+00-8.60.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature:

# Daily Biological Monitoring Form

**Monitor's Name:** Erin Murphy

**Date:** 05-05-03

**Time:** 1730

**Time(s) of Low Tide:** 527

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.50	time: 0530 Low Tide
7.40	
5.89	time: 0846 High Tide
8.64	
9.9	date/time: 05-1-03/1605
-0.0088	USGS rate between 05/05/03 and 05/05/03
15	
7.40	time: 0530 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Observable difference in Water Quality near construction area?

Yes

Observable sheen in boomed area?

Yes

Observable sheen outside boomed area?

Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

1+50 7+50

Approximate location of current sheet pile operation (STA.):

7+45 R 7+72 R

## Habitat

Were shoreline features moved or displaced since last monitoring event?

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

If yes, did you note time, direction, and location?

Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Clearing of broken concrete, boulders and remaining vegetation took place at STA 8+82.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature:

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-06-03

Time: 1730

Time(s) of Low Tide: 600

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.48	time: 0600 Low Tide
7.38	
5.80	time: 0922 High Tide
8.55	
8.64	date/time: 05-5-03/846
-0.0037	
15	
7.38	time: 0600 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

1+50	7+50
7+72 R	7+75 R

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: sheet pile construction.

Activities on west beach include: Slurry wall construction.

Sheen appeared on water after jet boat exited bay.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature:

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-07-03

Time: 1730

Time(s) of Low Tide: 647

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.44	time: 0700 Low Tide
8.34	
6.40	time: 1000 High Tide
9.15	
8.55	date/time: 05-6-03/0922
+0.0024	
15	
8.34	time: 0700 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

☒ Average ☐ Low

Observable difference in Water Quality near construction area?

Yes

☐ No

Observable sheen in boomed area?

Yes

☐ No

Observable sheen outside boomed area?

Yes

☐ No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82 14+00

Approximate location of current sheet pile operation (STA.):

7+75 R 8+34 R

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

☐ No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

☐ No

If yes, did you note time, direction, and location?

Yes

☐ No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature:



# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy and Mike Coenen

Date: 05-08-03

Time: 1730

Time(s) of Low Tide: 744

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.18	time: 0800 Low Tide
8.08	
NA	time: 1059 High Tide
NA	
9.15	date/time: 05-7-03/1000
NA	
15	
NA	time: 0744 (Site)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82 14+00

Approximate location of current sheet pile operation (STA.):

8+34 R 8+58 R

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions:

Notifications Made:

Monitor's Signature:

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-12-03

Time: 1730

Time(s) of Low Tide: 1236

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

6.11	time: 1230 Low Tide
6.01	
NA	time:
NA	
6.58	(USGS) 5/11/03, 1130
-0.0228	(USGS) Low Tide
15	
NA	time: 1230 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82 14+00

Approximate location of current sheet pile operation (STA.):

8+58 R 8+82 R

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Boom was washed onto shore over the weekend.

West Coast Marine reset boom at 0930. Staff gage is covered with algal growth, unable to read numbers.

Some sheen observed within the boom at the west beach. E & E will deploy absorbent boom tomorrow.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-13-03

Time: 1730

Time(s) of Low Tide: 1332

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

6.17	time: 1330 Low Tide
6.07	
NA	time:
NA	
6.01	(USGS) 5/12/03, 1230
+0.0064	(USGS) Low Tide
15	
6.07	time: 1330 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

8+82	14+00
8+82 R	9+37

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Absorbant boom was set in approximate location of observed sheen (west beach).

R=Revised

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-14-03

Time: 1730

Time(s) of Low Tide: 1424

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

6.96	time: 1430 Low Tide
6.86	
NA	time:
NA	
6.07	(USGS) 5/13/03, 1330
+0.0316	(USGS) Low Tide
15	
6.86	time: 1430 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82 14+00

Approximate location of current sheet pile operation (STA.):

9+37 9+92

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations.

Repaired silt fence with staple gun.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-15-03

Time: 1730

Time(s) of Low Tide: 1514

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.96	time: 1530 Low Tide
7.86	
NA	time:
NA	
6.86	(USGS) 5/14/03, 1430
-0.044	(USGS) Low Tide
15	
7.86	time: 1530 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82

14+00

Approximate location of current sheet pile operation (STA.):

9+90 (S)

10+46 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-19-03

Time: 1730

Time(s) of Low Tide: 528

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.96	time: 0530 Low Tide
7.86	
NA	time:
NA	
8.11	(USGS) 5/18/03, 0430
+0.006	(USGS) Low Tide
15	
7.86	time: 0530 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82	14+00
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Approximate location of current sheet pile operation (STA.):

10+46 (S)	11+00 (S)
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## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Boom was resting on piling about 8" above the water surface. At approximately 1555 boom was reset by E.Murphy.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

S=Staked

Corrective Actions: None taken.

Note: At approximately 1515 a man fell out of his boat near the site shore. As he called for help E.Murphy paged A. Murphy to bring life vest and oars and T. Feathers called 911. Man is ok.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-20-03

Time: 1730

Time(s) of Low Tide: 0622

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

7.77 time: 0630 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

7.67

Staff gauge height at site (ft):

NA

time:

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

7.86

(USGS) 5/19/03, 0530

River level rise (+) or fall (-) rate (ft/hr):

-0.0076

(USGS) Low Tide

Approximate distance from water to work area (ft):

15

Elevation of water surface at low tide (ft NGVD):

7.67

time: 0630 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82

14+00

Approximate location of current sheet pile operation (STA.):

11+00 (S)

11+60 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Repaired silt fence.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Turkey Vultures, Canadian geese, Osprey, Mallards, Gulls, and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-21-03

Time: 1730

Time(s) of Low Tide: 0728

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

6.99	time: 0730 Low Tide
6.89	
NA	time:
NA	
7.67	(USGS) 5/20/03, 0630
-0.0312	(USGS) Low Tide
15	
6.89	time: 0730 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Observable difference in Water Quality near construction area?

Yes

Observable sheen in boomed area?

Yes

Observable sheen outside boomed area?

Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

8+82 14+00

Approximate location of current sheet pile operation (STA.):

11+60 (S) 11+70 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

If yes, did you note time, direction, and location?

Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Repaired silt fence.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-22-03

Time: 1730

Time(s) of Low Tide: 0830

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.31	time: 0830 Low Tide
7.21	
NA	time:
NA	
6.89	(USGS) 5/21/03, 0730
+0.0128	(USGS) Low Tide
15	
7.21	time: 0830 (USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

8+82	14+00
11+70 (S)	12+10 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach. Yesterday evening intercept trench was potholed to determine if contamination could be observed within the trench. A. Murphy supervised this activity.

Activities on west beach include: Sheet pile operations.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, and Crows.

S=Staked

Corrective Actions: None taken.

## Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-27-03

Time: 1730

Time(s) of Low Tide: 1344

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.19	time: 1330 Low Tide
8.09	
NA	time:
NA	
6.31	(USGS) 5/26/03, 1300
+0.0727	(USGS) Low Tide
15	
8.09	time: 1330(USGS)

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	just west of railroad bridge.
12+10 (S)	12+54 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

Camera A, Roll #4, Photo's 10-12

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. A dead *Oncorhynchus mykiss* (Steelhead), approximately 28" in length washed ashore at 0830 this morning, near STA 10+35. Calls were made to both NOAA law enforcement and the Oregon NOAA habitat branch. No request was made to bag or preserve the dead fish.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Steelhead, Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: Informed NOAA and DEQ, See above

## Notifications Made:

NOAA Law enforcement

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-28-03

Time: 1730

Time(s) of Low Tide: 1426

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

10.08	time: 1430	Low Tide
9.98		
7.43	time: 1426	
10.18		
8.09	(USGS)	5/27/03, 1330
+0.0756	(USGS)	Low Tide
15		
10.18	time: 1426	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	just west of railroad bridge.
12+54 (S)	12+99 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Sheen was observed during sheet pile operations at area previously identified as a seep.

NOTE: High tide and spring runoff conditions on site. Water level is past silt fence during high tide and is causing fence to tear in various places.

\*Unable to read staff gage due to algal growth on the gage. E & E will clean the gage as soon as possible.

Animal Species identified: Deer, Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-29-03

Time: 1730

Time(s) of Low Tide: 1506

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

9.25

time: 1500 Low Tide

9.15

6.60

time: 1506

8.15

10.18

(USGS) 5/28/03, 1426

+0.08286

15

8.15

time: 1506

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25

just west of railroad bridge.

Approximate location of current sheet pile operation (STA.):

12+99 (S)

13+37 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Repaired silt fence in areas needed.

NOTE: High tide and spring runoff conditions on site. Water level is past silt fence during high tide and is causing fence to tear in various places.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 05-30-03

Time: 1730

Time(s) of Low Tide: 1548

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

9.97 time: 1530 Low Tide

9.87

7.40

time: 1548

10.15

8.15

(USGS) 5/29/03, 1506

+0.081633

15

10.15

time: 1530

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25

just west of railroad bridge.

Approximate location of current sheet pile operation (STA.):

13+37 (S)

13+90 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations. Repaired silt fence in areas needed.

NOTE: High tide and spring runoff conditions on site. Water level is past silt fence during high tide and is causing fence to tear in various places.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 06-02-03

Time: 1730

Time(s) of Low Tide: 1728

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

10.48	time: 1730 Low Tide
10.38	
NA	time: After work hours
NA	
11.39	(USGS) 6/01/03, 1700
-0.041	
15	
10.38	time: 1730

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25 just west of railroad bridge.

Approximate location of current sheet pile operation (STA.):

13+90 (S) 13+90 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Crane was down. Sheet pile crew went back to STA 8+82 and drove sheets an additional 6". Drilling crews drilled at both the at the bulk head and within the slurry trench.

E & E recommended to Remtech that the silt fencing should be pulled in and left only in the areas crews are currently working. Also recommended that all bio-bags and silt fencing not in use be pulled up onto the site. This was not done. Will talk with Remtech again in the morning.

NOTE: High tide and spring runoff conditions on site. Water level is past silt fence during high tide and is causing fence to tear in various places.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 06-03-03

Time: 1730

Time(s) of Low Tide: 1800

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

9.71	time: 1800 Low Tide
9.61	
NA	time: After work hours
NA	
10.38	(USGS) 6/02/03, 1730
-0.031	
15	
9.61	time: 1730

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one):

High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25 just west of railroad bridge.

Approximate location of current sheet pile operation (STA.):

13+90 (S) 14+32 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Crane was down. Sheet pile crew went back to STA 8+82 and drove sheets an additional 6". Drilling crews drilled at both the at the bulk head and within the slurry trench.

E & E recommended to Remtech that the silt fencing should be pulled in and left only in the areas crews are currently working. Also recommended that all bio-bags and silt fencing not in use be pulled up onto the site. This was not done. Will talk with Remtech again in the morning.

NOTE: High tide and spring runoff conditions on site. Water level is past silt fence during high tide and is causing fence to tear in various places.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 06-04-03

Time: 1730

Time(s) of Low Tide: 1842

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

9.12	time: 1900	Low Tide
9.02		
NA	time: After work hours	
NA		
9.61	(USGS)	6/03/03, 1800
-0.0236		
15		
9.02	USGS time: 1900	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25 just west of railroad bridge.

Approximate location of current sheet pile operation (STA.):

14+38 (S) 14+50 (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Erin Murphy

Date: 06-05-03

Time: 1730

Time(s) of Low Tide: 1925

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

1.55	time: 1930	Low Tide
1.45		
NA	time: After work hours	
NA		
9.02	(USGS)	6/04/03, 1900
15		
	USGS time: 1930	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	just west of railroad bridge.
14+50 (S)	14+ (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach include: Sheet pile operations.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-09-03

Time: 1530

Time(s) of Low Tide: 1130

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.35	time: 1130	Low Tide
8.25		
NA	time: Obscured by biological growth	
NA		
9.02	(USGS)	6/04/03, 1900
80		
	USGS time: 1930	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	just west of railroad bridge.
14+50 (S)	14+ (S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach include: Currently there are no activities on the east beach.

Activities on west beach (northwest corner of the site) include: Sheet pile operations.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves and Crows.

The Willamette cove has no observable sheen. The containment boom and absorbant boom are secured and anchored.

S=Staked

Corrective Actions: None taken.

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-10-03

Time: 1330

Time(s) of Low Tide: \*

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):  
 River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):  
 Staff gauge height at site (ft):  
 Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)  
 Previous staff gauge elevation at site (ft NGVD):  
 River level rise (+) or fall (-) rate (ft/hr):  
 Approximate distance from water to work area (ft):  
 Elevation of water surface at low tide (ft NGVD):

\* time: 1130 Low Tide  
 \* time: Obscured by biological growth  
 NA (USGS) 6/04/03, 1900  
 9.02  
 NA  
 USGS time: 1930

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average   
 Observable difference in Water Quality near construction area? Yes   
 Observable sheen in boomed area? Yes   
 Observable sheen outside boomed area? Yes   
 If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.): 10+25 South of railroad bridge.  
 Approximate location of current sheet pile operation (STA.): 14+50 (S) 15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes   
 If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes   
 If yes, did you note time, direction, and location? Yes   
 Photolog reference numbers:

## Perimeter Walk

Observations:  
 Activities on east beach include: Currently there are no activities on the east beach.  
 Activities on west beach (northwest corner of the site) include: No activities in beach area

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves, rabbits, and Crows.

S=Staked

\* Not recorded as there was no activity near the river today

Corrective Actions: NA

## Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-11-03

Time: 17:45

Time(s) of Low Tide: 13:30 and 00:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.85	time: 13:30 Low Tide
8.75	
NA	time: Obscured by biological growth
NA	
NA	(USGS) 6/04/03, 1900
80	
	USGS time: 1930

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	South of railroad bridge.
14+50 (S)	15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach (south of bulkhead) include: Currently there are no activities on the east beach.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, Osprey, Mallards, Gulls, Doves, rabbits, Herons, and Crows.

S=Staked

Corrective Actions: NA

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-12-03

Time: 17:45

Time(s) of Low Tide: 13:30 and 00:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.85	time: 13:30 Low Tide
8.75	
NA	time: Obscured by biological growth
NA	
NA	(USGS) 6/04/03, 1900
80	
	USGS time: 1930

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area? Yes

Observable sheen in boomed area? Yes

Observable sheen outside boomed area? Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

Approximate location of current sheet pile operation (STA.):

10+25	South of railroad bridge.
14+50 (S)	15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

If yes, did you note time, direction, and location?

Photolog reference numbers: 6/12/03-(14-20) by Andrew Murphy role A3

Yes	No
Yes	No

## Perimeter Walk

Observations:

Activities on east beach (south of bulkhead) include: Currently there are no activities on the east beach.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, and crows.

Approximately 7 carion eaters, turkey vultures, were utilizing the updrafts along the river bluff and upland bluff to search for food.

S=Staked

Corrective Actions: NA

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-16-03

Time: 17:45

Time(s) of Low Tide: 03:30 and 17:30

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.41	time: 17:30 Low Tide
7.31	
NA	time: Obscured by biological growth
NA	
NA	(USGS) 6/04/03, 1900
120	
7.31	USGS time: 17:30

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Observable difference in Water Quality near construction area?

Yes

Observable sheen in boomed area?

Yes

Observable sheen outside boomed area?

Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25 South of railroad bridge.

Approximate location of current sheet pile operation (STA.):

14+50 (S) 15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

If yes, did you note time, direction, and location?

Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Globules observed rising from the river bottom that created a sheen on the river surface. The sheen was approximately 50 yards southeast of the end of the bulkhead. The sheen was observed at approximately low tide (approximately 17:30) and did not appear to be construction related because site operations had stopped for the day.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, coyote, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-17-03

Time: 17:45

Time(s) of Low Tide: 04:00 and 18:30

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

8.02

time: 18:30 Low Tide

7.92

NA

time: Obscured by biological growth

NA

NA

(USGS) 6/04/03, 1900

120

7.92

USGS time: 18:30

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25

South of railroad bridge.

Approximate location of current sheet pile operation (STA.):

14+50 (S)

15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach (south of bulkhead) include: Currently there are no activities on the east beach.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, and crows.

S=Staked

Corrective Actions: NA

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Mike Coenen

Date: 06-18-03

Time: 17:45

Time(s) of Low Tide: 05:30 and 19:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr):

Approximate distance from water to work area (ft):

Elevation of water surface at low tide (ft NGVD):

7.76	time: 19:00	Low Tide
7.66		
NA	time: Obscured by biological growth	
NA		
NA	(USGS)	6/04/03, 1900
120		
7.66	USGS time: 19:00	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25 South of railroad bridge.

Approximate location of current sheet pile operation (STA.):

14+50 (S) 15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on east beach (south of bulkhead) include: Currently there are no activities on the east beach.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, and crows.

S=Staked

Corrective Actions: NA

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Mike Coenen

Date: 06-19-03

Time: 17:45

Time(s) of Low Tide: 06:00 and 20:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

7.64

time: 20:00 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

7.54

Staff gauge height at site (ft):

NA

time: Obscured by biological growth

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

7.76

(USGS) 6/04/03, 1900

River level rise (+) or fall (-) rate (ft/hr):

0.12

Approximate distance from water to work area (ft):

120

Elevation of water surface at low tide (ft NGVD):

7.54

USGS time: 17:30

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

10+25

South of railroad bridge.

Approximate location of current sheet pile operation (STA.):

14+50 (S)

15+ 03(S)

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Globules rising from the river bottom, followed by a sheen on the river surface was observed approximately 50 yards SE of the bulkhead. E&E took digital photographs to document the sheen. The globules did not appear construction related as they were observed approximately 630 feet from sheetpile activities and approximately 2-hours from the last attempt to drive sheetpile. However, the tide was nearing its lowest point of the day.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, coyote, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-23-03

Time: All day

Time(s) of Low Tide: 11:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

4.88	time: 11:00 Low Tide Below staff gauge
4.78	
NA	
NA	
NA	
-2.86	
40	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

2+50

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Sheet pile driving operation moved to the south end and WCMC has moved the containment boom.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, doves, herons, turkey vultures, barn swallows, coyote, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-24-03

Time: All day

Time(s) of Low Tide: 11:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

4.62

time: 11:00 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

4.52

Staff gauge height at site (ft):

NA

Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

-0.36

Not significant as water is low.

Approximate distance from water to work area (ft):

70

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50

50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

15+00

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, herons, barn swallows, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-25-03

Time: All day

Time(s) of Low Tide: 0

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

See Note

Note: Gauge malfunctioning and no data available.

NA

NA

Below staff gauge

NA

NA

NA

Not significant as water is low.

70

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50

50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

15+00

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

DSN 288,289, and 290 by AIM

## Perimeter Walk

Observations:

1. Bubble and visible rainbow sheen observed approximately 75-feet off bulkhead. Photos through filter lense were taken as requested by DEQ.

2. The fledgling osprey appear to be about half the size of their parents.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-26-03

Time(s) of Low Tide: 13:30

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

5.31

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

NA

Staff gauge height at site (ft):

NA

Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

NA

Not significant as water is low.

Approximate distance from water to work area (ft):

90

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50

9+00

Approximate location of current sheet pile operation (STA.):

Bulkhead

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

WCMC moved the containment boom (AM) to encompass bulkhead area for last attempt at refusals.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 06-30-03

Time: All day

Time(s) of Low Tide: 9:36

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

5.09
4.99
NA
NA
NA
NA
70

Below staff gauge

Not significant as water is low.

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50

9+00

Approximate location of current sheet pile operation (STA.):

Bulkhead

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Began excavated source area (interceptor trench) and transporting spoils into disposal cell within the barrier wall.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Canadian geese, osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/01/03

Time: All day

Time(s) of Low Tide:

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

4.62	time: Low Tide
4.52	
NA	Below staff gauge
NA	
NA	
NA	
60	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50

50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations: Activities included removing rocks and gravel from interceptor trench.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/02/03

Time: all day

Low Tide during work activity:

17:45

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

4.57 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

4.47

Staff gauge height at site (ft):

NA Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

-0.15

Approximate distance from water to work area (ft):

40

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes No

Observable sheen in boomed area?

Yes No

Observable sheen outside boomed area?

Yes No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes No

If yes, did you note time, direction, and location?

Yes No

Photolog reference numbers:

## Perimeter Walk

Observations:

Near beach activities today were focused on the excavation of source area from the interceptor trench.

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/03/03

Time(s) of Low Tide: 1

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

3.51 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

3.41

Staff gauge height at site (ft):

NA Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

-1.16

Approximate distance from water to work area (ft):

80

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average Low

Observable difference in Water Quality near construction area?

Yes No

Observable sheen in boomed area?

Yes No

Observable sheen outside boomed area?

Yes No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes No

If yes, did you note time, direction, and location?

Yes No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/7/03

Time(s) of Low Tide: 9:00

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

3.32	Low Tide
3.22	
NA	Below staff gauge
NA	
NA	
NA	Not significant as water level is very low.
50	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, American Kestrel (small falcon), gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/08/03

Time(s) of Low Tide: 0

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

3.74 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

3.64

Staff gauge height at site (ft):

NA Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

0.42 Not significant as water level is very low.

Approximate distance from water to work area (ft):

50

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High Average

Observable difference in Water Quality near construction area?

Yes

Observable sheen in boomed area?

Yes

Observable sheen outside boomed area?

Yes

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event? Yes

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event? Yes

If yes, did you note time, direction, and location? Yes

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, American Kestrel (small falcon), gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_



# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/09/03

Time(s) of Low Tide: 11:30

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

Staff gauge height at site (ft):

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

Previous staff gauge elevation at site (ft NGVD):

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

Approximate distance from water to work area (ft):

3.60	Low Tide
3.50	
NA	Below staff gauge
NA	
NA	
-0.14	Not significant as water level is very low.
50	

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average

Low

Observable difference in Water Quality near construction area?

Yes

No

Observable sheen in boomed area?

Yes

No

Observable sheen outside boomed area?

Yes

No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes

No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes

No

If yes, did you note time, direction, and location?

Yes

No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, American Kestrel (small falcon), gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature: \_\_\_\_\_

# Daily Biological Monitoring Form

Monitor's Name: Andrew Murphy

Date: 07/14/03

Time(s) of Low Tide:

## River Stage and Observations

USGS river stage at Morrison Bridge from gauge #14211720 (ft NGVD):

4.52 Low Tide

River stage at site using correction factor (-0.1 ft) from Morrison Bridge (ft NGVD):

4.42

Staff gauge height at site (ft):

NA Below staff gauge

Staff gauge elevation at site (= gauge height + 2.75)(ft NGVD)

NA

Previous staff gauge elevation at site (ft NGVD):

NA

River level rise (+) or fall (-) rate (ft/hr) using Morrison Bridge gauge:

NA Not significant as water level is very low.

Approximate distance from water to work area (ft):

50

## Water Quality Observations of Willamette River

Qualitative turbidity observation main channel away from site (circle one): High

Average Low

Observable difference in Water Quality near construction area?

Yes No

Observable sheen in boomed area?

Yes No

Observable sheen outside boomed area?

Yes No

If the answer was yes to any of the above, complete Observations and Corrective Actions, below.

## In-water Controls

Approximate location of boom (STA. To STA.):

5+50 50 feet beyond STA 1+52

Approximate location of current sheet pile operation (STA.):

completed

## Habitat

Were shoreline features moved or displaced since last monitoring event?

Yes No

If yes, document with pictures and describe in Observations and Corrective Actions, below.

## Photo Documentation

Were photographs taken during monitoring event?

Yes No

If yes, did you note time, direction, and location?

Yes No

Photolog reference numbers:

## Perimeter Walk

Observations:

Activities on west beach (North of bulkhead) include: No activity in beach area.

Animal Species identified: Osprey, American Kestrel (small falcon), gulls, and crows.

S=Staked

Corrective Actions:

Notifications Made:

Monitor's Signature:



# B

## Erosion and Sediment Transport Control Measure Forms

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-01-03

Time: 1730

Name of E & E monitor: Erin E. Murphy

Current weather conditions: Cool, high winds, off and on rain

Last 24 Hr weather conditions: Same as above

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	9:00, 17:10	First Inspection	Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas. No adverse impacts observed.
BMP # 8	Plastic Sheetting of stockpiles or temporary protection of disturbed areas	1700	First Inspection	Weekly or after .5 inch or greater rain event.	Ensure plastic sheetting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. Barrier required @ toe of stock pile.	Contractor begins covering soil stockpiles at 1650. Sand bags were unavailable and ends were buried instead.
BMP # 11	Gravel Construction Entrance	1710	First Inspection	Daily	There should be no sediment, rock or woodchip on paved surfaces.	Wash area is still being established. Crews have swept area.
BMP #13	Dust Control	900	First Inspection	Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rain has been off and on throughout the day therefore water controls are not necessary.
BMP # 28	Compost Sock			Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	
BMP	Bio-filter	1130, 1700	First Inspection	Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bags are being used in conjunction with the silt fence. Stakes are installed behind fence only. Bags are installed correctly. We have recommended that Remtech use either check dams or straw along southern edge of fence, where foot path has formed.
BMP #29	Sediment Fence	1130, 1700	First Inspection	Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to fence, look for under cutting and clogged geotextile.	Fence secured with staples rather than woven pockets. Posts installed down slope, as shown on the plans.
BMP Type 1 temporary	Tire Wash	0830, 1130, 1700	First Inspection	Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Construction crews are utilizing existing tire wash. Excess water will be discharged on-site in an upland area.
BMP	Mobile Fueling of Vehicles and Heavy Equipment		Has not been observed.	During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	Has not been observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-02-03

Name of E & E monitor: Erin E. Murphy

Current weather conditions: Cool with high winds, off and on rain.

Last 24 Hr weather conditions: Same as above

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas. No adverse impacts observed.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	1600		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. Barrier required @ toe of stock pile.	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1500		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area should be swept at end of day. Contractor plans to place rip-rap at entrance.
BMP #13	Dust Control	N/A		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	N/A (Rain)
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	1400		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Check dams have been placed along southern edge of fence.
BMP #29	Sediment Fence	1600		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to fence, look for under cutting and clogged geotextile.	Temporary fence continues to be installed.
BMP Type 1 temporary	Tire Wash	1600		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Recommend pumping of collected water and removal of sediments.
BMP	Mobile Fueling of Vehicles and Heavy Equipment			During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	Mobile fueling will take place at 5:30am, today's fueling not observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-03-03

Name of E & E monitor: Erin E. Murphy

Current weather conditions: Cool with high winds, off and on rain.

Last 24 Hr weather condition: Same as above

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas. No adverse impacts observed.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0700, 930, 1130, 1600, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	0700, 1130, 1300, 1600, 1710		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area should be swept at end of day. Contractor placed 2"-4" quarry spalls on gravel entrance near decon pad.
BMP #13	Dust Control	N/A		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rained off and on.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	0700, 1130, 1600		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Additional bio-bags need to be placed along silt fence where missing.
BMP #29	Sediment Fence	0700, 1600		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Fence is in good condition.
BMP Type 1 temporary	Tire Wash	0700, 1130, 1600		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Recommend pumping of collected water and removal of sediments.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	630		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	Did not use secondary measures to collect drips beneath nozzles. Spill kits were located nearby, and three personnel supervised the activity.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-07-03

Name of E & E monitor: Erin E. Murphy

Current weather conditions: Cool with moderate winds, off and on rain.

Last 24 Hr weather condition: Same as above

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas. No adverse impacts observed.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0700, 0850, 1030, 1230, 1700		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection. Remtech needs to provide sand bags.
BMP # 11	Gravel Construction Entrance	0700, 0850, 1030, 1230, 1700		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area needs to be swept.
BMP #13	Dust Control	N/A		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rained off and on.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	0730, 1030, 1620		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Contractor is completing installation of bio-bags along silt fence.
BMP #29	Sediment Fence	0830, 1420		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Additional fence was installed to approximate station 4 + 00. Fence is not buried, taunt, or wrapped/overlapped at ends were a new section of fence is added.
BMP Type 1 temporary	Tire Wash	0700, 0850, 1030, 1230, 1700		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Recommend pumping of collected water and removal of sediments. This has not been done to date.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	N/A		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	There were no mobile fueling activities today.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-09-03

Name of E & E monitor: Erin E. Murphy

Current weather conditions: Cool with moderate winds.

Last 24 Hr weather condition: Off and on rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Spoke with Troy Feathers, They will start crushing the vegetation were feasible and attempt to leave roots in place.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0730, 1200, 1715		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1500		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area around decon and work trailers recently swept.
BMP #13	Dust Control			Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No rain, moderate winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	1330		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater then 1/3 the height of bag.	Bags around survey stakes were put back into place.
BMP #29	Sediment Fence	0800, 1330		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence was repaired in areas needed at 0945.
BMP Type 1 temporary	Tire Wash	1530		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Tire wash pumped at 1600.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	630		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts observed.

Signature of monitor: \_\_\_\_\_



## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-10-03

Name of E & E monitor:

Current weather conditions:

Last 24 Hr weather conditions:

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Minimal vegetation removed.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas			Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance			Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area around decon and work trailers recently swept.
BMP #13	Dust Control			Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rain, moderate winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter			Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater then 1/3 the height of bag.	
BMP #29	Sediment Fence			Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Rain event was not greater than .5 inch, however, a Visual inspection was performed. Silt fence integrity appears to be satisfactory.
BMP Type 1 temporary	Tire Wash			Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	
BMP	Mobile Fueling of Vehicles and Heavy Equipment	630		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-14-03

Name of E & E monitor: Erin Murphy

Current weather conditions: High winds (15), Scattered showers

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation was cleared from STA 16 + 00 - 14+00. Spoke with Troy and requested vegetation be crushed were feasible.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0730, 1500		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	0730, 1500		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good.
BMP #13	Dust Control	1500		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Some scattered showers, high winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	1500		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Additional bags have been ordered and will be placed at west beach.
BMP #29	Sediment Fence	0730, 1300, 1500		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east beach appears to be satisfactory. New fencing was installed along west beach from STA 14 + 00 through 15+ 00. New fence is adequate.
BMP Type 1 temporary	Tire Wash	0730, 1300, 1500		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	630		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-15-03

Name of E & E monitor: Erin Murphy

Current weather conditions: slight winds, Few showers

Last 24 Hr weather conditions: Scattered showers and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0730, 100, 1245, 1500, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	0730, 100, 1245, 1500, 1710		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good.
BMP #13	Dust Control	1115		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Some scattered showers, high winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	8,001,115		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Spoke with Troy Feathers and requested bio bags be places as soon as possible along the silt fence at the west beach. Additional bags have been ordered and should be here tomorrow.
BMP #29	Sediment Fence	0800, 1030		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory.
BMP Type 1 temporary	Tire Wash	0730, 100, 1245, 1500, 1710		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	630		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-16-03

Name of E & E monitor: Erin Murphy

Current weather conditions: slight winds, sun

Last 24 Hr weather conditions: Scattered showers and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1030, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1030		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area needs to be swept, will recommend to Remtech.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Some scattered showers, high winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	800, 1030		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No change from precious inspection.
BMP #29	Sediment Fence	0800, 1030		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory.
BMP Type 1 temporary	Tire Wash	1030		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Remtech pumped out tire wash.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-17-03

Name of E & E monitor: Erin Murphy

Current weather conditions: slight winds, sun

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1030, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1030		Daily	There should be no sediment, rock or woodchip on paved surfaces.	No changes from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Some scattered showers, high winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	800, 1030		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Spoke with Troy Feathers (Remtech), he assured me the bags would be in soon.
BMP #29	Sediment Fence	0800, 1030		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Additional fence was added along the west from STA 11+50 - 15+00.
BMP Type 1 temporary	Tire Wash	1030		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-21-03

Name of E & E monitor: Erin Murphy

Current weather conditions: slight winds, rain

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheetting of stockpiles or temporary protection of disturbed areas	0610, 1030, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheetting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1030		Daily	There should be no sediment, rock or woodchip on paved surfaces.	No changes from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Some scattered showers, high winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater then 1/3 the height of bag.	Bio bags were installed along the west beach.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east beach appear to be satisfactory. Silt fence along the west beach will need to be repaired.
BMP Type 1 temporary	Tire Wash			Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from precious inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-22-03

Name of E & E monitor: Erin Murphy

Current weather conditions: slight winds, rain

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area recently swept and cleaned.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Partly cloudy, moderate winds. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east beach appears to be satisfactory. Silt fence along the west beach was repaired at 0735.
BMP Type 1 temporary	Tire Wash	1000		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Recently pumped.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-23-03

Name of E & E monitor: Erin Murphy

Current weather conditions: moderate winds, rain

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	High volume of rain. No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east beach appears to be satisfactory. Silt fence along the west beach is ripped in the same place (STA 12+50). E & E informed Troy Feathers (Remtech).
BMP Type 1 temporary	Tire Wash	1720		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_



## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-24-03

Name of E & E monitor: Erin Murphy

Current weather conditions: moderate winds, rain

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good. No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No evidence of dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east beach appears to be satisfactory. Silt fence along the west beach is ripped in the same place (STA 12+50). E & E informed Troy Feathers (Remtech).
BMP Type 1 temporary	Tire Wash	1720		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-28-03

Name of E & E monitor: Erin Murphy

Current weather conditions: High winds.

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good. No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Water trucks sprayed roads at 1700. Winds @ 20 MPH. No notable dust.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory.
BMP Type 1 temporary	Tire Wash	1720		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-29-03

Name of E & E monitor: Erin Murphy

Current weather conditions: moderate winds.

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Limited clearing in work areas.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good. No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rain in morning, no need for water trucks.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection.
BMP #29	Sediment Fence	735		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory.
BMP Type 1 temporary	Tire Wash	1720		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 04-30-03

Name of E & E monitor: Erin Murphy

Current weather conditions: moderate winds.

Last 24 Hr weather conditions: Rain and wind.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation was cleared from STA 12+50 to 8+82. Additional clearing will be required tomorrow for installation of sheet pile.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks good. No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Rain in early morning, no need for water trucks.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-bags will need to be placed along silt fence from STA13+00 to 8+82.
BMP #29	Sediment Fence	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Additional silt fence installed from 13+00 to 8.82.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-01-03

Name of E & E monitor: Erin Murphy

Current weather conditions: sunny and warm

Last 24 Hr weather conditions: Overcast.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Remaining vegetation was cleared from STA 12+50 to 8+82. A few tree's still remain between 12+00 and 12+50. These trees are scheduled to be removed sometime late next week.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	No change from previous inspection.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater then 1/3 the height of bag.	Bio-bags were installed along silt fence from STA13+00 to 8+82.
BMP #29	Sediment Fence	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas ripped/torn by wildlife have been restapled.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-05-03

Name of E & E monitor: Erin Murphy

Current weather conditions: sunny and warm

Last 24 Hr weather conditions: Overcast.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Remaining vegetation and large boulders were removed from STA 9+50 to 8+82. A few tree's still remain between 12+00 and 12+50. These trees are scheduled to be removed sometime late this week.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area clean.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No change from previous inspection.
BMP #29	Sediment Fence	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence have been ripped/torn by wildlife in same locations. E & E will restaple before tomorrow at 10:00.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-06-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy and cool.

Last 24 Hr weather conditions: Overcast.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	No change from previous inspection.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1000		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area clean.
BMP #13	Dust Control	1530		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No change from previous inspection.
BMP #29	Sediment Fence	735, 1030, 1235, 1500, 1715		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence have been ripped/torn by wildlife in same locations. Remtech repaired required areas in AM.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No change from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	620		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-07-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy and cool.

Last 24 Hr weather conditions: Overcast.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	No change from previous inspection.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area recently swept and cleaned.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Sediment removed and water pumped out at 0830.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_



## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-08-03

Name of E & E monitor: Andrew Murphy & Mike Coenen

Current weather conditions: Partly cloudy and cool.

Last 24 Hr weather conditions: Overcast.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	No change from previous inspection.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area recently swept and cleaned.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1520		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No changes from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-12-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy and cool (PM); Sunny (AM).

Last 24 Hr weather conditions: Same

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Tree's are still standing from 12+00-12+50, but should be removed sometime this week.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Rock debris and mud have been carried through the reduction zone and the support zone from an unwashed truck. Remtech has been notified.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	One truck did not utilize tire wash. Tire wash is full and will need to be pumped again.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No change from previous inspection.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-13-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sunny

Last 24 Hr weather conditions: few clouds, no rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Tree's are still standing from 12+00-12+50, but should be removed sometime this week.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks satisfactory.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No changes from previous inspection.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly. E & E repaired fence in areas needed at 0800.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Over-filled.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-14-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sunny

Last 24 Hr weather conditions: few clouds, no rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Tree's are still standing from 12+00-12+50.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	High rain volume kept area clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Not needed due to high rain volume.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Overfilled due to rain.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-15-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Overcast and rain.

Last 24 Hr weather conditions: few clouds, no rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Tree's are still standing from 12+00-12+50.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks satisfactory.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	Not needed/High rain volume.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Overfilled due to rain.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-19-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sunny

Last 24 Hr weather conditions: few clouds, no rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Tree removal between 12+00-12+50 began and will continue tomorrow.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks satisfactory.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Recently pumped.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-20-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy, scattered showers

Last 24 Hr weather conditions: few clouds, no rain.

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete between 12+00-12+50.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area needs to be swept.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly. E & E and Remtech repaired silt fence along west beach.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Sediment was removed at 1435.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-21-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Same

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area looks clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly. E & E repaired silt fence along west beach.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No changes from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_



## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-22-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Same

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area need to be swept.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	No changes from previous inspection.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-27-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sunny and warm

Last 24 Hr weather conditions: Partly cloudy

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area was sprayed with water truck. Rocks and mud are still present.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-28-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Partly cloudy

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area was sprayed with water truck, and appears clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence integrity along the east and west beaches appear to be satisfactory. Areas along the west fence continue to be ripped/torn by wildlife in same locations nightly. High water level is also causing rips and tears in fence.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-29-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Partly cloudy

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area is clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Remtech repaired the silt fencing in the morning. Due to seasonal high tides and spring runoff the silt fence was moved slightly inland at STA 8.82 to avoid impacts to the fence.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 05-30-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Partly cloudy

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area is clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Remtech repaired the silt fencing in the morning.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 06-02-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Partly cloudy

Last 24 Hr weather conditions: Partly cloudy

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area is clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater then 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence and bio-bags were in river upon arrival. E & E recommended that Remtech pull up/remove silt fence and bio-bags in areas were construction crews are not operating and will not be operating in the future.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 06-03-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sun

Last 24 Hr weather conditions: Sun and warm

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	0610, 1000, 1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1200		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area is clean.
BMP #13	Dust Control	1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags are in good condition.
BMP #29	Sediment Fence	640, 1000, 1200, 1400, 1700		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence and bio-bags were in river upon arrival. E & E recommended that Remtech pull up/remove silt fence and bio-bags in areas where construction crews are not operating and will not be operating in the future. This still has not been done.
BMP Type 1 temporary	Tire Wash	1100		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	E. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 06-04-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sun

Last 24 Hr weather conditions: Sun and warm

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1300		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area is clean.
BMP #13	Dust Control	1300, 1400, 1500, 1600, 1700		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter			Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	Bio-filter bags have been moved behind the sheet pile in all areas except that of current sheet pile operations.
BMP #29	Sediment Fence	1500		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence has been removed in areas no longer required. Existing silt fence continues to be ripped nightly by wildlife.
BMP Type 1 temporary	Tire Wash	1500		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	M. Coenen supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_



## Erosion and Sediment Transport Control Measures Inspection Form

Date: 06-05-03

Name of E & E monitor: Erin Murphy

Current weather conditions: Sun

Last 24 Hr weather conditions: Sunny and hot

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas	1530, 1710		Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	No changes from previous inspection.
BMP # 11	Gravel Construction Entrance	1300		Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area has been recently swept.
BMP #13	Dust Control	1300, 1400, 1500, 1600, 1700		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter			Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	No changes from previous inspection. Bio-bags remain in good condition.
BMP #29	Sediment Fence	1500		Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	Silt fence has been removed in areas no longer required. Existing silt fence continues to be ripped nightly by wildlife.
BMP Type 1 temporary	Tire Wash	1500		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 07-01-03

Name of E & E monitor: Andrew Murphy

Current weather conditions: Sun

Last 24 Hr weather conditions: Sunny and hot

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas			Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	NA
BMP # 11	Gravel Construction Entrance			Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area needs to be cleaned.
BMP #13	Dust Control	0800, 1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter			Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	NA
BMP #29	Sediment Fence			Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence in taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	NA
BMP Type 1 temporary	Tire Wash	1200		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_

## Erosion and Sediment Transport Control Measures Inspection Form

Date: 07-02-03

Name of E & E monitor: Andrew

Current weather conditions: Sun

Last 24 Hr weather conditions: Sunny and hot

DEQ BMP Designation	BMP Name	Inspection Time(s)	Date and Time of last Inspection Time(s)	Minimum Inspection Frequency	Description of BMP	Observations (Effectiveness)
BMP #4	Preserve Existing Vegetation	Continual		Weekly or after .5 inch or greater rain event.	Preserving natural habitat to the greatest extent possible. Preserve in clumps or as individual trees. Using safety fence or flagging to delineate prior to commencing work. Delineate work extent.	Vegetation removal is complete, no additional removal of existing vegetation is anticipated.
BMP # 8	Plastic Sheeting of stockpiles or temporary protection of disturbed areas			Weekly or after .5 inch or greater rain event.	Ensure plastic sheeting is covering all soil stockpiles. Look for rips tears on the surface and runoff seeps under matting. Plastic should be anchored w/10' grid spacing using sandbags or suitable system. Minimum 12" overlap of all seams required. B	NA
BMP # 11	Gravel Construction Entrance			Daily	There should be no sediment, rock or woodchip on paved surfaces.	Area needs to be cleaned.
BMP #13	Dust Control	0800, 1200		Continual	Apply water or controls as needed. Keep vehicular traffic in current construction areas and established access routes.	No dust observed. Water trucks were utilized.
BMP # 28	Compost Sock	N/A (not installed)		Weekly or after .5 inch or greater rain event.	May be utilized as a check dam and is not efficient for turbidity or suspended solids. When utilized as check dam, they must be staked. May have down stream skirt for undercut protection.	Not Applicable/Not installed.
BMP	Bio-filter			Weekly or after .5 inch or greater rain event.	Bags should be overlapped by 6". 2 stakes should support each bag. Check for undercutting or end-flow. Inspect for tears and damage. Sediment should not be greater than 1/3 the height of bag.	NA
BMP #29	Sediment Fence			Weekly or after .5 inch or greater rain event.	Ensure bottom of fence is not visible and fence is taut. Posts should be a maximum of 6' apart. At termination point, fence should be facing uphill. Fence should not exceed 3' and storage should not exceed 1.5'. Check for channel formation parallel to	NA
BMP Type 1 temporary	Tire Wash	1200		Weekly or more frequent during high demand	Dimensions: 40' long x 10' wide X 18" sump with 50' run out. Ensure wash water drainage/collection and treatment system is functioning and/or frequent water replacement.	Needs to be pumped and have sediment removed.
BMP	Mobile Fueling of Vehicles and Heavy Equipment	615		During fueling operations	Ensure compliance with local and state regulations. Request documentation for 49 CFR 178 for DOT 406. Specifics too numerous to summarize, refer to BMP.	A. Murphy supervised mobile fueling activities. No adverse impacts were observed.

Signature of monitor: \_\_\_\_\_



# C

## Photodocumentation



Photo 1 Upland vegetation at far northwest portion of site.  
*Direction: Southwest*



Photo 2 Upland vegetation just above bank along northwest beach.  
*Direction: Southwest*



**MCCORMICK AND BAXTER CREOSOTING COMPANY SITE**  
Portland, Oregon

Date: 5/29/03

Time: 9:03

Taken by: Noreen Roster



Photo 3 Dense vegetation along bank.  
*Direction: East*

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Date: 5/29/03

Time: 9:05

Taken by: Noreen Roster



Photo 4 Canadian goose on northwest beach with woody debris.  
*Direction: Southeast*

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Photo 5 Osprey building nest.  
*Direction: South*



Photo 6 Northwest beach.  
*Direction: West*





Photo 7 Vegetation along bank of northwest beach.  
*Direction: Southeast*



Photo 8 Snag and woody debris along northwest beach.  
*Direction: Southeast*





Photo 9 Woody debris near bulkhead.  
*Direction: Northwest*



Photo 10 Vegetation and woody debris along bank of southeast beach.  
*Direction: Southeast*





Photo 11 Woody debris along southeast beach.  
*Direction: Southeast*



Photo 12 Upland vegetation at south portion of site.  
*Direction: Southeast*





Photo 13 Upland vegetation of south-eastern portion of site.  
*Direction: East*



Photo 14 Upland vegetation of central portion of site.  
*Direction: Northeast*





Photo 15 Nutria or beaver activity.  
*Direction: East*



Photo 16 Crew is moving logs waterward on southeast beach to prepare for installation of silt fence.  
*Direction: Northwest*





Photo 17 View of boom and log displacement at southeast beach.  
*Direction: West*



Photo 18 Tree removal along the northwest bank.  
*Direction: East*





Photo 19 Silt fence along northwest beach.  
*Direction: Northwest*



Photo 20 Dead *Oncorhynchus tshawytscha* found on northwest beach.  
*Direction: Down*



Date: 5/27/03

Time: 8:45

Taken by: Erin Murphy



Photo 21 Dead *Oncorhynchus mykiss* found on northwest beach.  
Direction: Down

Date: 5/1/03

Time: 10:03

Taken by: Andrew Murphy



Photo 22 View of bank erosion at southeast bank.  
Direction: Northwest





Photo 23 Observed sheen in water.  
*Direction: West*



Photo 24 Silt fence and bio-bags on northwest beach after a high water event.  
*Direction: Northwest*





Photo 25 Silt fence and bio-bags on southeast beach after a high water event.  
*Direction: Northwest*



Photo 26 Jute mat installation along southeast bank.  
*Direction: Northwest*



Date: 7/29/03

Time: 9:53

Taken by: Andrew Murphy

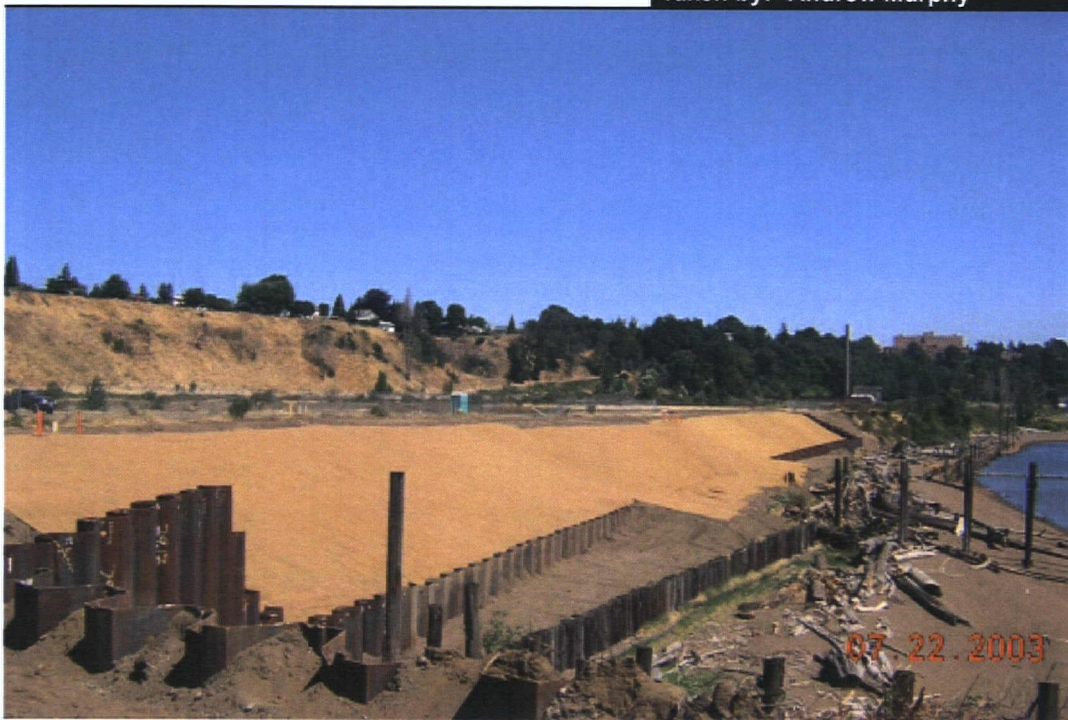


Photo 27 Jute mat on southeast bank.  
*Direction: East*

Date: 7/21/03

Time: 15:57

Taken by: Mike Coenen



Photo 28 Osprey at bulkhead during the clean-up phase of construction.  
*Direction: West*